What is claimed is:

1. An immortalized chondrocyte derived from a chondrocyte isolated from a specific zone of articular cartilage.

2. The immortalized chondrocyte of claim 1, wherein the chondrocyte retains one or more characteristics of non-immortalized chondrocytes.

3. The immortalized chondrocyte of claim 1, wherein the chondrocyte is derived from superficial zone cartilage.

4. The immortalized chondrocyte of claim 1, wherein the chondrocyte expresses SZP, or fragments or derivatives of SZP having lubricating properties.

5. The immortalized chondrocyte of claim 1, wherein the chondrocyte is non-tumor derived.

6. The immortalized chondrocyte of claim 1, wherein the chondrocyte is immortalized by transduction with a virus.

7. The immortalized chondrocyte of claim 6, wherein the virus is a baculovirus.

8. A method of culturing chondrocytes in a serum-free medium, comprising culturing the chondrocytes in serum-free medium supplemented with insulin, transferrin, and selenium.

9. A method of making isolated SZP, or fragments or derivatives of SZP having lubricating properties, comprising the steps of:

(a) culturing chondrocytes in serum-free medium under conditions that allow expression of SZP or its fragments or derivatives;
(b) harvesting the medium from the cultured chondrocytes; and
(c) isolating SZP or its fragments or derivatives from the medium.

10. The method of claim 9, wherein the chondrocytes are immortalized.

11. A method of making SZP, or a fragment or derivative thereof having lubricating properties, comprising

(a) culturing a cell comprising an exogeneous nucleic acid that encodes the SZP or its fragment or derivative, wherein the exogeneous nucleic acid is operably linked to an expression control sequence, and wherein the culture conditions permit expression of SZP under the control of the expression control sequence;

(b) harvesting the medium from the cultured cells, and

(c) isolating the SZP from the cell or culture medium.

12. The method of claim 11, wherein the cell is an insect cell.

13. The method of claim 12, wherein the insect cell is a baculovirus-infected cell

14. The method of claim 11, wherein the cell is a mammalian cell.

15. The method of claim 11, wherein the isolated SZP lacks glycosylation.

16. The method of claim 15, wherein the isolated SZP lacking glycosylation has a molecular weight of about 110kDa.

17. The method of claim 11, wherein the isolated SZP is glycosylated.

18. The method of claim 17, wherein the isolated, glycosylated SZP has a molecular weight of greater than 280kDa.

19. The method of claim 11, wherein the culture conditions include serum free culture medium.

20. A method of modulating lubrication of an articular surface of a joint, comprising contacting the articular surface of the joint with an SZP binding protein, under conditions which allow SZP to bind to the SZP binding protein.

21. The method of claim 20, wherein the SZP binding protein is selected from the group consisting of an SZP antibody, lectins, hyaluronan, fibronectin, and albumin.

22. A method of modulating lubrication of a biological surface, comprising contacting the surface with an SZP binding protein, under conditions which allow SZP to bind to the SZP binding protein.

23. A method of modulating lubrication of a biologically compatible surface comprising contacting the surface with an SZP binding protein, under conditions which allow SZP to bind to the SZP binding protein.

24. A method of inhibiting cell adhesion to a biological surface comprising contacting the biological surface with SZP, or a fragment or derivative of SZP having cell adhesion inhibiting properties, under conditions which allow SZP, or the fragment or derivative thereof, to inhibit cell adhesion to the surface.

25. The method of claim 24, wherein the biological surface is selected from the group consisting of cartilage, tendon, ligament, pericardium, and blood vessel.

26. The method of claim 24, wherein the SZP or its fragment or derivative lacks glycosylation.

27. The method of claim 26, wherein the SZP or its fragment or derivative lacking glycosylation has a molecular weight of about 110kDa.

28. The method of claim 24, wherein the SZP or its fragment or derivative is glycosylated.

29. The method of claim 28, wherein the glycosylated SZP or its fragment or derivative has a molecular weight of greater than 280kDa.

30. A method of inhibiting cell adhesion to a biologically compatible surface comprising contacting the biologically compatible surface with SZP, or a fragment or derivative of SZP having cell adhesion inhibiting properties, under conditions which allow the SZP, or fragment or derivative thereof, to inhibit cell adhesion to the surface.

31. The method of claim 30, wherein the biologically compatible surface is the surface of a prosthetic device.

32. The method of claim 30, wherein the SZP or its fragment or derivative lacks glycosylation.

33. The method of claim 32, wherein the SZP or its fragment or derivative lacking glycosylation has a molecular weight of about 110kDa.

34. The method of claim 30, wherein the SZP or its fragment or derivative is glycosylated.

35. The method of claim 34, wherein the glycosylated SZP or its fragment or derivative has a molecular weight of greater than 280kDa.

36. A method of inhibiting cell adhesion to an articular surface of a joint, comprising contacting the articular surface of the joint with SZP, or fragments or derivatives of SZP, having cell adhesion inhibiting

properties, under conditions which allow the SZP, or fragment or derivative thereof, to inhibit cell adhesion to the articular surface.

37. The method of claim 36, wherein the contacting step is *in vivo*.

38. The method of claim 36, wherein the contacting step is extra-corporeal.

39. The method of claim 36, wherein the joint is a prosthetic joint.

40. The method of claim 36, wherein the joint is a natural joint.

41. The method of claim 40, wherein the joint shows one or more signs of a degenerative joint condition.

42. The method of claim 36, wherein the SZP or its fragment or derivative lacks glycosylation.

43. The method of claim 42, wherein the SZP or its fragment or derivative lacking glycosylation has a molecular weight of 110kDa or less.

44. The method of claim 36, wherein the SZP or its fragment or derivative is glycosylated.

45. The method of claim 44, wherein the glycosylated SZP or its fragment or derivative has a molecular weight of greater than 280kDa.

46. A method of promoting lubrication of a biological surface comprising contacting the biological surface with SZP or its fragment or derivative made according to the method of claim 11, under conditions which allow the SZP, or fragment or derivative thereof, to bind to the biological surface.

47. A method of promoting lubrication of a biologically compatible surface comprising contacting the biologically compatible surface with SZP or its fragment or derivative made according to the method of claim 11, under conditions which allow the SZP, or fragment or derivative thereof, to bind to the surface.

48. The method of claim 47, wherein the biologically compatible surface is the surface of a prosthetic device.

49. A method of promoting lubrication of an articular surface of a joint, comprising contacting the articular surface of the joint with SZP or its fragment or derivative made according to the method of claim 11, under conditions which allow the SZP, or fragment or derivative thereof, to bind to the articular surface.

50. The method of claim 49, wherein the contacting step is *in vivo*.

51. The method of claim 49, wherein the contacting step is extra-corporeal.

52. The method of claim 49, wherein the joint is a prosthetic joint.

53. The method of claim 49, wherein the joint is a natural joint.

54. The method of claim 53, wherein the joint shows one or more signs of a degenerative joint condition.

55. A method of treating a subject with a degenerative joint condition or of delaying symptoms of a degenerative joint condition in a subject, comprising administering to the subject a therapeutically effective amount of SZP or fragments or derivatives of SZP made according to the method of claim 11.

56. The method of claim 55, wherein the degenerative joint condition is an arthritic condition.

57. The method of claim 56, wherein the arthritic condition is osteoarthritis.

58. The method of claim 56, wherein the arthritic condition is rheumatoid arthritis.

59. A purified SZP polypeptide comprising the amino acid sequences of SEQ ID NOs:2 and 3 and having a molecular weight of less than 110 kDa.

60. A purified SZP polypeptide comprising the amino acid sequences of SEQ ID NOs:2 and 3 with one or more conservative amino acid substitutions.

61. A purified SZP polypeptide comprising an amino acid sequence having at least 80% identity to SEQ ID NOs:2 and 3.

62. An isolated nucleic acid comprising a nucleotide sequence that encodes the SZP polypeptide of claim 59.

63. The isolated nucleic acid of claim 62, comprising the nucleotide sequences of SEQ ID NO:5 and 6 or their degenerate variants.

64. An expression vector comprising the nucleic acid of claim 63 operably linked to an expression control sequence.

65. A cultured cell comprising the vector of claim 64.

66. The isolated nucleic acid of claim 63, further comprising a nucleotide sequence encoding one or more mucin repeats.

67. An isolated nucleic acid comprising a sequence that hybridizes under highly stringent conditions to a hybridization probe having the nucleotide sequence of SEQ ID NOs:5 and 6 or their complements.

68. A method of imaging an articular surface or synovium of a joint, comprising:

(a) contacting the articular surface or synovium of the joint with detectably tagged SZP or its fragment or derivative, under

conditions in which the detectably tagged SZP or its fragment or derivative binds to the articular surface or synovium;

(b) visualizing the detectable tag in a plurality of locations on the articular surface or synovium;

(c) the visualization of detectable tag showing the articular surface or synovium of the joint.

69. The method of claim 68, wherein the detectable tag is a radiolabel.

70. The method of claim 69, wherein the radiolabel is selected from the group consisting of gamma-emitters, beta-emitters, and alpha-emitters.

71. The method of claim 68, wherein the detectable tag is a fluorescent label.

72. The method of claim 68, wherein the detectable tag is a magnetic label.

73. The method of claim 68, wherein the visualization step comprises a means of visualization selected from the group consisting of nuclear magnetic resonance, X-radiography, positron emission tomography, computerized axial tomography, magnetic resonance imaging, and ultrasonography.

74. A method of imaging an articular surface or synovium of a joint, comprising:

(a) contacting the articular surface or synovium of the joint with detectably tagged SZP binding protein, under conditions in which

the detectably tagged SZP binding protein binds to SZP on the articular surface or synovium;

(b) visualizing the detectable tag in a plurality of locations on the articular surface or synovium;

(c) the visualization of detectable tag showing the articular surface or synovium of the joint.

75. The method of claim 74, wherein the detectable tag is a radiolabel.

76. The method of claim 75, wherein the radiolabel is selected from the group consisting of gamma-emitters, beta-emitters, and alpha-emitters.

77. The method of claim 74, wherein the detectable tag is a fluorescent label.

78. The method of claim 74, wherein the detectable tag is a magnetic label.

79. The method of claim 74, wherein the visualization step comprises a means of visualization selected from the group consisting of nuclear magnetic resonance, X-radiography, positron emission tomography, computerized axial tomography, magnetic resonance imaging, and ultrasonography.

80. The method of claim 74, wherein the SZP binding protein is selected from the group consisting of lectins, hyaluronan, fibronectin, and albumin.